

WHAT IS CLAIMED IS:

1. A composite electronic component comprising:

a first case member;

a surface acoustic wave device mounted on the first case member and which includes a package, a surface acoustic wave element accommodated within the package, and a ground terminal, the package having a conductor in at least one portion thereof; and

a conductive second case member to be connected to a ground potential and fixed to the first case member;

wherein at least one of the external surface of the conductor of the package and the internal surface of the second case member is provided with an insulating material layer disposed in an opposing portion between the external surface of the conductor of the package and the internal surface of the second case member.

2. A component according to Claim 1, wherein the insulating material layer is provided on the external surface of the conductor of the package.

3. A component according to Claim 1, wherein the insulating material layer is provided on the internal surface of the second case member.

4. A component according to Claim 1, wherein the first case member is a planar case circuit board and the second case member includes a top plate and an annular side-wall extending downwardly from the periphery of the top plate so as to surround the surface acoustic wave device mounted on the planar first case member.

5. A component according to Claim 1, wherein the second case member is made of a metal.

6. A component according to Claim 1, wherein the second case member is made of an insulator and a conductive film provided on the external surface of the insulator.

7. A component according to Claim 1, wherein the package includes first and second package members, the surface acoustic wave element being mounted on the first package member, the second package member having the conductor.

8. A component according to Claim 7, wherein the first package member includes a bottom plate and an annular side-wall extending upwardly from the periphery of the bottom plate so as to have an opening opened upwardly and the

second package member is a planar lid which is fixed so as to close the opening of the first package.

9. A component according to Claim 7, wherein the first package member is a planar package circuit board and the second package member includes a top plate and an annular side-wall extending downwardly from the periphery of the top plate so as to surround the surface acoustic wave element mounted on the planar package circuit board.

10. A component according to Claim 9, wherein the second package member includes a metallic cap.

11. A component according to Claim 1, wherein a plurality of the surface acoustic wave devices are mounted on the first case member.

12. A component according to Claim 1, wherein the surface acoustic wave device includes a plurality of surface acoustic wave elements.

13. A component according to Claim 12, wherein each of the plurality of surface acoustic wave elements has a ladder-type circuit structure including a series arm resonator and a parallel arm resonator.

14. A component according to Claim 1, wherein the composite electronic component is a duplexer.

15. A communication device comprising a composite electronic component according Claim 1.

16. A composite electronic component comprising:  
a first case member;  
a surface acoustic wave device mounted on the first case member and which includes a package, a surface acoustic wave element accommodated within the package, and a ground terminal, the package having a conductor in at least one portion thereof; and

a conductive second case member to be connected to a ground potential and fixed to the first case member, the conductive second case member having an opening in one portion opposing the conductor of the package.

17. A component according to Claim 16, wherein the first case member is a planar case circuit board and the second case member includes a top plate and an annular side-wall extending downwardly from the periphery of the top plate so as to surround the surface acoustic wave device mounted on the planar first case member.

18. A component according to Claims 16, wherein the second case member is made of a metal.

19. A component according to Claim 16, wherein the second case member is made of an insulator and a conductive film disposed on the external surface of the insulator.

20. A component according to Claim 16, wherein the package includes first and second package members, the surface acoustic wave element being mounted on the first package member, the second package member having the conductor.

21. A component according to Claim 20, wherein the first package member includes a bottom plate and an annular side-wall extending upwardly from the periphery of the bottom plate so as to have an opening opened upwardly and the second package member is a planar lid which is fixed so as to close the opening of the first package.

22. A component according to Claim 20, wherein the first package member is a planar package circuit board and the second package member includes a top plate and an annular side-wall extending downwardly from the periphery of

the top plate so as to surround the surface acoustic wave element mounted on the planar package circuit board.

23. A component according to Claim 22, wherein the second package member includes a metallic cap.

24. A component according to Claim 16, wherein a plurality of the surface acoustic wave devices are mounted on the first case member.

25. A component according to Claim 16, wherein the surface acoustic wave device includes a plurality of surface acoustic wave elements.

26. A component according to Claim 25, wherein each of the plurality of surface acoustic wave elements has a ladder-type circuit structure including a series arm resonator and a parallel arm resonator.

27. A component according to Claim 16, wherein the composite electronic component is a duplexer.

28. A communication device comprising a composite electronic component according to Claim 16.